



# National Nutrient Database for Standard Reference

## Release 28 slightly revised May, 2016

### Statistics Report 11012, Asparagus, cooked, boiled, drained

Report Date: July 04, 2017 19:35 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per 100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
<strong>Proximates</strong>													
Water <sup>1</sup>	g	92.63	4	0.140	92.29	92.93	3.0	92.189	93.081	1	Analytical or derived from analytical	--	12/2002
Energy	kcal	22	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
Energy	kJ	94	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
Protein <sup>1</sup>	g	2.40	4	0.124	2.23	2.77	3.0	2.009	2.796	1	Analytical or derived from analytical	--	12/2002
Total lipid (fat) <sup>1</sup>	g	0.22	4	0.033	0.16	0.31	3.0	0.112	0.323	1	Analytical or derived from analytical	--	12/2002
Ash <sup>1</sup>	g	0.63	4	0.020	0.6	0.69	3.0	0.571	0.699	1	Analytical or derived from analytical	--	12/2002
Carbohydrate, by difference	g	4.11	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
Fiber, total dietary <sup>1</sup>	g	2.0	4	0.085	1.8	2.2	3.0	1.703	2.247	1	Analytical or derived from analytical	--	12/2002
Sugars, total	g	1.30	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

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Sucrose <a href="#">1</a>	g	0.08	4	0.052	0.03	0.24	3.0	-0.079	0.249	1	Analytical or derived from analytical	--	12/2002
Glucose (dextrose) <a href="#">1</a>	g	0.42	4	0.066	0.24	0.53	3.0	0.214	0.635	1	Analytical or derived from analytical	--	12/2002
Fructose <a href="#">1</a>	g	0.79	4	0.087	0.56	0.95	3.0	0.515	1.07	1	Analytical or derived from analytical	--	12/2002
Lactose <a href="#">1</a>	g	0.00	4	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Maltose <a href="#">1</a>	g	0.00	4	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Galactose	g	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	12/2002
Starch <a href="#">1</a>	g	0.00	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	12/2002
<b>Minerals</b>													
Calcium, Ca <a href="#">1</a>	mg	23	4	0.866	21	25	3.0	20.268	25.782	1	Analytical or derived from analytical	--	12/2002
Iron, Fe <a href="#">1</a>	mg	0.91	4	0.113	0.58	1.08	3.0	0.546	1.265	1	Analytical or derived from analytical	--	12/2002
Magnesium, Mg <a href="#">1</a>	mg	14	4	0.430	13	15	3.0	12.731	15.469	1	Analytical or derived from analytical	--	12/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Phosphorus, P <a href="#">1</a>	mg	54	4	2.689	49	62	3.0	45.866	62.984	1	Analytical or derived from analytical	--	12/2002
Potassium, K <a href="#">1</a>	mg	224	4	7.632	203	237	3.0	199.211	247.789	1	Analytical or derived from analytical	--	12/2002
Sodium, Na <a href="#">1</a>	mg	14	4	1.138	11	16	3.0	10.503	17.747	1	Analytical or derived from analytical	--	12/2002
Zinc, Zn <a href="#">1</a>	mg	0.60	4	0.033	0.51	0.66	3.0	0.496	0.703	1	Analytical or derived from analytical	--	12/2002
Copper, Cu <a href="#">1</a>	mg	0.165	4	0.028	0.1	0.24	3.0	0.076	0.254	1	Analytical or derived from analytical	--	12/2002
Manganese, Mn <a href="#">1</a>	mg	0.154	4	0.010	0.14	0.18	3.0	0.123	0.186	1	Analytical or derived from analytical	--	12/2002
Selenium, Se <a href="#">1</a>	µg	6.1	2	--	1.7	10.5	1.0	--	--	1	Analytical or derived from analytical	--	12/2002
Fluoride, F <a href="#">2</a> <a href="#">3</a>	µg	21.9	13	17.950	4	39.9	1.0	-206.126	250.026	2	Analytical or derived from analytical	--	01/2006
<b>Vitamins</b>													
Vitamin C, total ascorbic acid <a href="#">1</a>	mg	7.7	4	0.771	6	9.5	3.0	5.222	10.128	1	Analytical or derived from analytical	--	12/2002
Thiamin <a href="#">1</a>	mg	0.162	4	0.012	0.15	0.2	3.0	0.123	0.201	1	Analytical or derived from analytical	--	12/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Riboflavin <a href="#">1</a>	mg	0.139	4	0.007	0.13	0.16	3.0	0.117	0.161	1	Analytical or derived from analytical	--	12/2002
Niacin <a href="#">1</a>	mg	1.084	4	0.047	0.96	1.16	3.0	0.933	1.234	1	Analytical or derived from analytical	--	12/2002
Pantothenic acid <a href="#">1</a>	mg	0.225	4	0.020	0.19	0.28	3.0	0.162	0.289	1	Analytical or derived from analytical	--	12/2002
Vitamin B-6 <a href="#">1</a>	mg	0.079	4	0.011	0.06	0.11	3.0	0.045	0.114	1	Analytical or derived from analytical	--	12/2002
Folate, total <a href="#">1</a>	μg	149	4	8.230	136	171	3.0	123.059	175.441	1	Analytical or derived from analytical	--	12/2002
Folic acid	μg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2001
Folate, food	μg	149	4	8.230	136	171	3.0	123.059	175.441	1	Analytical or derived from analytical	--	03/2006
Folate, DFE	μg	149	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
Choline, total <a href="#">1</a>	mg	26.1	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Betaine <a href="#">1</a>	mg	0.9	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Vitamin B-12	μg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	08/1984
Vitamin B-12, added	μg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Vitamin A, RAE	µg	50	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Retinol	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	06/2002
Carotene, beta <sup>1</sup>	µg	604	4	60.732	500	771	3.0	410.223	796.777	1	Analytical or derived from analytical	--	12/2002
Carotene, alpha <sup>1</sup>	µg	0	4	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Cryptoxanthin, beta <sup>1</sup>	µg	0	4	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Vitamin A, IU	IU	1006	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Lycopene <sup>1</sup>	µg	30	4	2.204	26	36	3.0	22.661	36.689	1	Analytical or derived from analytical	--	12/2002
Lutein + zeaxanthin	µg	771	4	78.514	603	977	3.0	521.132	1020.868	1	Analytical or derived from analytical	11019	03/2006
Vitamin E (alpha-tocopherol)	mg	1.50	--	--	--	--	--	--	--	--	Calculated or imputed	11019	03/2006
Vitamin E, added	mg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Tocopherol, beta	mg	0.02	--	--	--	--	--	--	--	--	Calculated or imputed	11019	03/2006
Tocopherol, gamma	mg	0.21	--	--	--	--	--	--	--	--	Calculated or imputed	11019	03/2006
Tocopherol, delta	mg	0.00	--	--	--	--	--	--	--	--	Calculated or imputed	11019	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Vitamin D (D2 + D3)	µg	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	--	--	--	--	--	--	Assumed zero	--	02/2009
Vitamin K (phylloquinone) <sup>1</sup>	µg	50.6	4	4.354	42.8	62.7	3.0	36.72	64.43	1	Analytical or derived from analytical	--	12/2002
<b>Lipids</b>													
Fatty acids, total saturated	g	0.048	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
4:0	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	03/2006
6:0	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	03/2006
8:0 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
10:0 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
12:0 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
14:0 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
15:0 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
16:0 <sup>1</sup>	g	0.048	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
17:0 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
18:0 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:0 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:0 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
24:0 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Fatty acids, total monounsaturated	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
14:1 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
15:1 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
16:1 undifferentiated <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
17:1 <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
18:1 undifferentiated <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:1 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:1 undifferentiated <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Fatty acids, total polyunsaturated	g	0.105	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
18:2 undifferentiated <sup>1</sup>	g	0.076	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
18:3 undifferentiated <sup>1</sup>	g	0.029	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
18:4 <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:2 n-6 c,c <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:3 undifferentiated <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:4 undifferentiated <sup>1</sup>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
20:5 n-3 (EPA) <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:5 n-3 (DPA) <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:6 n-3 (DHA) <a href="#">1</a>	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Fatty acids, total trans	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	06/2015
Cholesterol	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	08/1984
<b>Amino Acids</b>													
Tryptophan <a href="#">1</a>	g	0.029	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Threonine <a href="#">1</a>	g	0.092	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Isoleucine <a href="#">1</a>	g	0.082	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Leucine <a href="#">1</a>	g	0.140	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Lysine <a href="#">1</a>	g	0.113	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Methionine <a href="#">1</a>	g	0.034	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Cystine <a href="#">1</a>	g	0.034	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Phenylalanine <a href="#">1</a>	g	0.082	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Tyrosine <a href="#">1</a>	g	0.057	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Valine <a href="#">1</a>	g	0.125	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Arginine <a href="#">1</a>	g	0.099	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Histidine <a href="#">1</a>	g	0.053	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Alanine <a href="#">1</a>	g	0.125	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Aspartic acid <a href="#">1</a>	g	0.555	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Glutamic acid <a href="#">1</a>	g	0.255	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Glycine <a href="#">1</a>	g	0.101	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Proline <sup>1</sup>	g	0.077	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Serine <sup>1</sup>	g	0.116	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
<b>Other</b>													
Alcohol, ethyl	g	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	03/2006
Caffeine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	12/2002
Theobromine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	12/2002
<b>Flavonoids</b>													
Flavonols													
Quercetin <sup>5 6</sup>	mg	15.2	--	2.42	7.61	28.4	--	--	--	--	--	--	--
Isoflavones													
Daidzein <sup>7</sup>	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Genistein <sup>7</sup>	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Total isoflavones <sup>7</sup>	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin													
Proanthocyanidin dimers <sup>4</sup>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin trimers <sup>4</sup>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin 4-6mers <sup>4</sup>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin 7-10mers <sup>4</sup>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin polymers (>10mers) <sup>4</sup>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--

**Sources of Data**

<sup>1</sup>Nutrient Data Laboratory, ARS, USDA National Food and Nutrient Analysis Program Wave 6h, 2002 Beltsville MD

<sup>2</sup>Donald Taves Dietary Intake of Fluoride Ashed (total fluoride) v. Unashed (inorganic fluoride) Analysis of Individual Foods, 1983 British Journal of Nutrition 49 pp.295-301

<sup>3</sup>Robert Ophaug Fluoride, Unpublished - Ophaug, Microdiffusion

<sup>4</sup>Gu, L., Kelm, M.A., Hammerstone, J.F., Beecher, G., Holden, J., Haytowitz, D., Gebhardt, S., and Prior, R.L. Screening foods containing proanthocyanidins and their structural characterization using LC-MS/MS and thiolytic degradation, 2003 J. Agric. Food Chem. 51 pp.7513-7521

<sup>5</sup>Fanasca, S., Rouphael, Y., Venneria, E., Azzini, E., Duazzo, A., and Maiani, G. Antioxidant properties of raw and cooked spears of green asparagus cultivars., 2009 Int. J. Food Sci. Technol. 44 pp.1017-1023

<sup>6</sup>Makris, D.P. and Rossiter, J.T. Domestic processing of onion bulbs (*Allium cepa*) and asparagus spears (*Asparagus officinalis*): Effect on flavonol content and antioxidant status, 2001 J. Agric. Food Chem. 49 7 pp.3216-3222

<sup>7</sup>Liggins, J., Bluck, L. J. C., Runswick, C., Atkinson, C., Coward, W. A., and Bingham, S. A. Daidzein and genistein content of vegetables., 2000 Brit. J. Nutr. 84 pp.717-725